

## 16. Changes in Matter

01. Study the page 96 in your text book (science part 2) and write down the observations made when following metal elements are heated in air and the related balanced chemical equations.

Na, Mg, Zn, Fe, Cu, Ag, Pt, Au

- 02. Answer the following questions that are based on the metals given below. Na, Mg, Zn, Fe, Cu, Ag, Pt,
  - 1. What are the metals that react with cold water?
  - 2. What are the metals that react with hot water?
  - 3. What are the metals that react with water vapour (steam)?
  - 4. What are the metals that do not react with water under any circumstances?
  - 5. Write balanced chemical equations for the above reactions.

03.

- 1. What are the metals that react violently with dilute acids?
- 2. What are the metals that slowly react with dilute acids?
- 3. Write the balanced chemical equations related to the reactions of those metals with dilute HCl acid.
- 4. What are the metals that do not react with dilute acids?
- 04. Study the activity 16.7 on page 98 of the science text book and answer the following questions.
  - 1. What observations did you see while performing the above activity?
  - 2. Identify the chemical reactions that cause the observations you have made and construct balanced chemical equations related to them.